

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Jay Lahti	Examiner:	Alter, A.M.
Serial No.	10/632,026	Group Art Unit:	3762
Filing Date:	July 31, 2003	Docket No.:	P0011616.00
Title:	CONNECTOR ASSEMBLY FOR CONNECTING A LEAD AND AN IMPLANTABLE MEDICAL DEVICE		

Appeal Brief

COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The following Brief is submitted pursuant to the Notice of Appeal mailed August 4, 2009.

Any required fee will be made at the time of submission via EFS-Web. In the event fees are not or cannot be paid at the time of EFS-Web submission, please charge any fees under 37 CFR § 1.16, 1.17, 1.136(a), or any additional fees to Deposit Account 13-2546.

I. Real party in interest

The real party in interest in this application is Medtronic, Inc, assignee of the application.

II. Related appeals and interferences

This appeal is related to the appeal in US Patent Application No. 10/632,026, filed July 31, 2003 by Ries, et al. for a “Small Format Clip of an Implantable device. The Notice of Appeal in the Ries, et al. application was filed on August 4, 2009, concurrent with the Notice of Appeal in the present application and the Appeal brief in the Ries, et al. application is filed concurrent with the this Appeal Brief. As discussed below, the two applications are each subject to a double patenting rejection with regard to the other.

The Ries, et al. application is also subject to a rejection over the prior art. The present application is not.

III. Status of the claims

Claims 1, 3 – 17, 19 – 33 and 35 – 52 are pending. Claims 1, 3 – 17, 19 – 33 and 35 – 48 stand rejected for obviousness-type double patenting over the Ries, et al application cited above. Claims 2, 18 and 34 are cancelled. Claims 49 – 52 are withdrawn due to a finding of constructive election in the Final Office Action. This election requirement was not traversed. These claims will be withdrawn upon indication of allowability of the appealed claims.

IV. Status of amendments

The Response mailed April 3, 2009 has been received by the Patent according to PAIR. No Advisory Action was mailed or received. The Notice of Appeal was filed when it became clear no Advisory Action would be mailed.

The response of April 3, 2009 contained no amendments to the claims.

The Appendix of Claims reflects the claims as rejected by the Final Office Action of February 4, 2009.

V. Summary of claimed subject matter

1. Claim 1

Claim 1 sets forth A connector assembly for detachably connecting a lead to an implantable medical device. The assembly comprises a connector block having a connector port to receive a proximal end of a lead inserted therein along an insertion axis of orientation. The connector block is illustrated in Figure 1 and is described generally in paragraph [0031].

The assembly further comprises a deflectable connector clip including a first arm, a second arm, and a top portion extending between the first arm and the second arm, the connector clip capable of being deflected, prior to insertion of the lead, from a first position corresponding to a first relative position of the first arm and the second arm to a second position corresponding to a second relative position of the first arm and the second arm. The clip is illustrated in Figures 3A – 3D. The two positions of the clip are illustrated in Figures 3A and 3C. The clip is described in paragraphs [0039 – 40]

The assembly finally requires a housing mounted within the connector block, the housing having a first annular member and a second annular member, the first member formed to be fixedly engaged with the second member to form an aperture in alignment with the connector port to receive the lead proximal end along the insertion axis, the

connector clip being enclosed within the housing, wherein the connector clip is positioned within one of the first member and the second member while in the second position, wherein the first arm extends from the top portion to a first end and the second arm extends from the top portion to a second end, and wherein the connector clip includes a first side wall along the first end and a second side wall along the second end, the end of the first arm and the end of the second arm being offset and partially overlapping so that the first side wall is adjacent to and engaged against the second side wall when the connector clip is in the first position, and the first arm and the second arm being partially spread apart so that the ends are non-overlapping and aligned so that the first end abuts the second end and the first side wall is not adjacent to and engaged against the second side wall when the connector clip is in the second position, the connector clip being oriented perpendicular to the insertion axis of orientation of the proximal end of a lead such that the arms, the non-overlapping ends of the arms, and the top portion together circumscribe an opening through which the proximal end of a lead passes during insertion. The housing is illustrated in Figures 2 and 4 which show the two annular members, their configurations as claimed and the location of the clips within the housing. These drawings are described in paragraphs [0037 – 38] and [0041], respectively.

2. Claim 17

Claim 17 sets forth An implantable medical device capable of being detachably connected to a lead. The device comprises a connector block having a connector port to receive a proximal end of a lead inserted therein along an insertion axis of orientation. The connector block is illustrated in Figure 1 and is described generally in paragraph [0031].

The device further comprises a first deflectable connector clip including a first arm, a second arm, and a top portion extending between the first arm and the second arm, the connector clip capable of being deflected, prior to insertion of the lead, from a first position corresponding to a first relative position of the first arm and the second arm to a second position corresponding to a second relative position of the first arm and the

second arm. The clip is illustrated in Figures 3A – 3D. The two positions of the clip are illustrated in Figures 3A and 3C. The clip is described in paragraphs [0039 – 40].

The device finally comprises a housing mounted within the connector block, the housing having a first annular member and a second annular member, the first member formed to be fixedly engaged with the second member to form an aperture in alignment with the connector port to receive the lead proximal end along the insertion axis, the connector clip being enclosed within the housing, wherein the connector clip is positioned within one of the first member and the second member while in the second position, wherein the first arm extends from the top portion to a first end and the second arm extends from the top portion to a second end, and wherein the connector clip includes a first side wall along the first end and a second side wall along the second end, the end of the first arm and the end of the second arm being offset and partially overlapping so that the first side wall is adjacent to and engaged against the second side wall when the connector clip is in the first position, and the first arm and the second arm being partially spread apart so that the ends are non-overlapping and aligned so that the first end abuts the second end and the first side wall is not adjacent to and engaged against the second side wall when the connector clip is in the second position, the connector clip being oriented perpendicular to the insertion axis of orientation of the proximal end of a lead such that the arms, the non-overlapping ends of the arms, and the top portion together circumscribe an opening through which the proximal end of a lead passes during insertion. The housing is illustrated in Figures 2 and 4 which show the two annular members, their configurations as claimed and the location of the clips within the housing. These drawings are described in paragraphs [0037 – 38] and [0041], respectively.

3. Claim 33.

Claim 33 sets forth an implantable medical device capable of being detachably connected to a lead. The device comprises a connector block having a connector port to receive a proximal end of a lead inserted therein along an insertion axis of

orientation. The connector block is illustrated in Figure 1 and is described generally in paragraph [0031].

The device further comprises a first deflectable connector clip and a second deflectable connector clip, each of the first connector clip and the second connector clip including a first arm, a second arm, and a top portion extending between the first arm and the second arm, and capable of being deflected, prior to insertion of the lead, from a first position corresponding to a first relative position of the first arm and the second arm to a second position corresponding to a second relative position of the first arm and the second arm. . The clip is illustrated in Figures 3A – 3D. The two positions of the clip are illustrated in Figures 3A and 3C. The clip is described in paragraphs [0039 – 40].

The device finally comprises a housing mounted within the connector block, the housing having a first annular member and a second annular member, wherein the first connector clip is positioned, while in the second position, within the first annular member and the second connector clip is positioned, while in the second position, within the second annular member and oriented generally orthogonally to the first connector clip, and the first member is formed to be fixedly engaged with the second member to form an aperture in alignment with the connector port to receive the lead proximal end along the insertion axis, the first connector clip and the second connector clip being enclosed within the housing, wherein, for each of the first connector clip and the second connector clip, the first arm extends from the top portion to a first end and the second arm extends from the top portion to a second end, and wherein each of the first connector clip and the second connector clip includes a first side wall along the first end and a second side wall along the second end, the end of the first arm and the end of the second arm being offset and partially overlapping so that the first side wall is adjacent to and engaged against the second side wall when the first connector clip and the second connector clip is in the first position, and the first arm and the second arm being partially spread apart so that the ends are non-overlapping and aligned so that the first end abuts the second end and the first side wall is not adjacent to and engaged against the

second side wall when the first connector clip and the second connector clip is in the second position, each of the connector clips being oriented perpendicular the insertion axis of orientation of the proximal end of a lead such that the arms,, the non-overlapping ends of the arms, and the top portion together circumscribe an opening through which the proximal end of a lead passes during insertion. The housing is illustrated in Figures 2 and 4 which show the two annular members, their configurations as claimed and the location of the clips within the housing. These drawings are described in paragraphs [0037 – 38] and [0041], respectively.

VI. Grounds of rejection to be reviewed on appeal - Rejection of Claims 1, 3 – 17, 19 – 33 and 35 – 48 for obviousness-type double patenting over the Ries, et al application cited above.

The grounds of rejection applies to all claims. Individual claims are not separately argued

VII. Argument: Rejection of Claims 1, 3 – 17, 19 – 33 and 35 – 48 for obviousness-type double patenting over the Ries, et al application cited above.

The Argument applies to all claims. Individual claims are not separately argued

All claims in the Ries, et al application are presently indicated to be unpatentable and are finally rejected. The claims of the present application have all been found allowable over the prior art, by the same Examiner. Applicants acknowledge that if and when allowable subject matter is indicated in the Ries, et al. application, the question of double patenting should be reviewed in that case with respect to the present application, assuming the claims herein are issued. However, a final rejection of the claims of the present case is believed clearly improper under the circumstances. The claims of the Ries, et al application may change substantially during further prosecution.

The Commissioner is authorized to charge any deficiencies and credit any overpayments to Deposit Account No. 13-2546 for entry of the instant Response.

Respectfully submitted,

Date: October 5, 2009

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VIII. Claims Appendix

The claims on appeal are as follows:

1. A connector assembly for detachably connecting a lead to an implantable medical device, comprising:

a connector block having a connector port to receive a proximal end of a lead inserted therein along an insertion axis of orientation;

a deflectable connector clip including a first arm, a second arm, and a top portion extending between the first arm and the second arm, the connector clip capable of being deflected, prior to insertion of the lead, from a first position corresponding to a first relative position of the first arm and the second arm to a second position corresponding to a second relative position of the first arm and the second arm; and

a housing mounted within the connector block, the housing having a first annular member and a second annular member, the first member formed to be fixedly engaged with the second member to form an aperture in alignment with the connector port to receive the lead proximal end along the insertion axis, the connector clip being enclosed within the housing, wherein the connector clip is positioned within one of the first member and the second member while in the second position, wherein the first arm extends from the top portion to a first end and the second arm extends from the top portion to a second end, and wherein the connector clip includes a first side wall along the first end and a second side wall along the second end, the end of the first arm and the end of the second arm being offset and partially overlapping so that the first side wall is adjacent to and engaged against the second side wall when the connector clip is in the first position, and the first arm and the second arm being partially spread apart so that the ends are non-overlapping and aligned so that the first end abuts the second end and the first side wall is not adjacent to and engaged against the second side wall when the connector clip is in the second position, the connector clip being oriented perpendicular to the insertion axis of orientation of the proximal end of a lead such that the arms, the non-overlapping ends of the arms, and the top portion together

circumscribe an opening through which the proximal end of a lead passes during insertion.

2. (Canceled)

3. The connector assembly of claim 1, wherein the housing and the connector clip are formed of an electrically conductive metal.

4. The connector assembly of claim 3, wherein the electrically conductive metal is stainless steel.

5. The connector assembly of claim 1, wherein the first member and the second member form an aperture to receive the lead, the first arm and the second arm being engaged against the lead as the lead is advanced through the aperture to further deflect the first arm and the second arm from the second position to a third position corresponding to a third relative position of the first arm and the second arm.

6. The connector assembly of claim 5, wherein the first end is extended a distance outward from the second end when the connector clip is in the third position.

7. The connector assembly of claim 1, wherein the first member includes a first flange extending outward from a front surface of the first member to a first flange top portion, and the second member includes a second flange extending outward from a front surface of the second member to a second flange top portion, the first flange top portion being fixedly engaged against the second flange top portion to enclose the connector clip within the housing.

8. The connector assembly of claim 7, wherein the first flange and the front surface of the first member form a first recessed portion and the second flange and the front surface of the second member form a second recessed portion, the connector clip being

positioned within one of the first recessed portion and the second recessed portion and deflected to the second position.

9. The connector assembly of claim 8, wherein the connector clip includes a bottom portion, the first arm extending from the top portion to the bottom portion and the second arm extending from the top portion to the bottom portion, and wherein the top portion is engaged against one of the first flange and the second flange and the bottom portion is spaced from the one of the first flange and the second flange.

10. The connector assembly of claim 8, wherein the front surface of the first member and the front surface of the second member form an aperture to receive the lead within the housing, the first arm and the second arm being engaged against the lead as the lead is advanced through the aperture to further deflect the first arm and the second arm from the second position to a third position corresponding to a third relative position of the first arm and the second arm.

11. The connector assembly of claim 10, wherein the first end is extended a distance outward from the second end when the connector clip is in the third position.

12. The connector assembly of claim 1, wherein the first member includes a first flange extending outward from a front surface of the first member and the second member includes a second flange extending outward from a front surface of the second member, the second flange capable of being fixedly engaged about the first flange to enclose the connector clip within the housing.

13. The connector assembly of claim 12, wherein the second member includes a third flange extending outward from the front surface of the second member, the first flange and the front surface of the first member forming a first recessed portion and the third flange and the front surface of the second member form a second recessed

portion, the connector clip being positioned within one of the first recessed portion and the second recessed portion and deflected to the second position.

14. The connector assembly of claim 13, wherein the connector clip includes a bottom portion, the first arm extending from the top portion to the bottom portion and the second arm extending from the top portion to the bottom portion, and wherein the top portion is engaged against one of the first flange and the third flange and the bottom portion is spaced from the one of the first flange and the third flange.

15. The connector assembly of claim 13, wherein the front surface of the first member and the front surface of the second member form an aperture to receive the lead within the housing, the first arm and the second arm being engaged against the lead as the lead is advanced through the aperture to further deflect the first arm and the second arm from the second position to a third position corresponding to a third relative position of the first arm and the second arm.

16. The connector assembly of claim 15, wherein the first end is extended a distance outward from the second end when the connector clip is in the third position.

17. An implantable medical device capable of being detachably connected to a lead, comprising:

- a connector block having a connector port to receive a proximal end of a lead inserted therein along an insertion axis of orientation;

- a first deflectable connector clip including a first arm, a second arm, and a top portion extending between the first arm and the second arm, the connector clip capable of being deflected, prior to insertion of the lead, from a first position corresponding to a first relative position of the first arm and the second arm to a second position corresponding to a second relative position of the first arm and the second arm; and

- a housing mounted within the connector block, the housing having a first annular member and a second annular member, the first member formed to be fixedly engaged

with the second member to form an aperture in alignment with the connector port to receive the lead proximal end along the insertion axis, the connector clip being enclosed within the housing, wherein the connector clip is positioned within one of the first member and the second member while in the second position, wherein the first arm extends from the top portion to a first end and the second arm extends from the top portion to a second end, and wherein the connector clip includes a first side wall along the first end and a second side wall along the second end, the end of the first arm and the end of the second arm being offset and partially overlapping so that the first side wall is adjacent to and engaged against the second side wall when the connector clip is in the first position, and the first arm and the second arm being partially spread apart so that the ends are non-overlapping and aligned so that the first end abuts the second end and the first side wall is not adjacent to and engaged against the second side wall when the connector clip is in the second position, the connector clip being oriented perpendicular to the insertion axis of orientation of the proximal end of a lead such that the arms, the non-overlapping ends of the arms, and the top portion together circumscribe an opening through which the proximal end of a lead passes during insertion.

18. (Canceled)

19. The device of claim 17, wherein the housing and the connector clip are formed of an electrically conductive metal.

20. The device of claim 19, wherein the electrically conductive metal is stainless steel.

21. The device of claim 17, wherein the first member and the second member form an aperture to receive the lead, the first arm and the second arm being engaged against the lead as the lead is advanced through the aperture to further deflect the first arm and

the second arm from the second position to a third position corresponding to a third relative position of the first arm and the second arm.

22. The device of claim 21, wherein the first end is extended a distance outward from the second end when the connector clip is in the third position.

23. The device of claim 17, wherein the first member includes a first flange extending outward from a front surface of the first member to a first flange top portion, and the second member includes a second flange extending outward from a front surface of the second member to a second flange top portion, the first flange top portion being fixedly engaged against the second flange top portion to enclose the connector clip within the housing.

24. The device of claim 23, wherein the first flange and the front surface of the first member form a first recessed portion and the second flange and the front surface of the second member form a second recessed portion, the connector clip being positioned within one of the first recessed portion and the second recessed portion and deflected to the second position.

25. The device of claim 23, wherein the connector clip includes a bottom portion, the first arm extending from the top portion to the bottom portion and the second arm extending from the top portion to the bottom portion, and wherein the top portion is engaged against one of the first flange and the second flange and the bottom portion is spaced from the one of the first flange and the second flange.

26. The device of claim 24, wherein the front surface of the first member and the front surface of the second member form an aperture to receive the lead within the housing, the first arm and the second arm being engaged against the lead as the lead is advanced through the aperture to further deflect the first arm and the second arm from

the second position to a third position corresponding to a third relative position of the first arm and the second arm.

27. The device of claim 26, wherein the first end is extended a distance outward from the second end when the connector clip is in the third position.

28. The device of claim 17, wherein the first member includes a first flange extending outward from a front surface of the first member and the second member includes a second flange extending outward from a front surface of the second member, the second flange capable of being fixedly engaged about the first flange to enclose the connector clip within the housing.

29. The device of claim 28, wherein the second member includes a third flange extending outward from the front surface of the second member, the first flange and the front surface of the first member forming a first recessed portion and the third flange and the front surface of the second member form a second recessed portion, the connector clip being positioned within one of the first recessed portion and the second recessed portion and deflected to the second position.

30. The device of claim 29, wherein the connector clip includes a bottom portion, the first arm extending from the top portion to the bottom portion and the second arm extending from the top portion to the bottom portion, and wherein the top portion is engaged against one of the first flange and the third flange and the bottom portion is spaced from the one of the first flange and the third flange.

31. The device of claim 29, wherein the front surface of the first member and the front surface of the second member form an aperture to receive the lead within the housing, the first arm and the second arm being engaged against the lead as the lead is advanced through the aperture to further deflect the first arm and the second arm from

the second position to a third position corresponding to a third relative position of the first arm and the second arm.

32. The device of claim 31, wherein the first end is extended a distance outward from the second end when the connector clip is in the third position.

33. An implantable medical device capable of being detachably connected to a lead, comprising:

- a connector block having a connector port to receive a proximal end of a lead inserted therein along an insertion axis of orientation;

- a first deflectable connector clip and a second deflectable connector clip, each of the first connector clip and the second connector clip including a first arm, a second arm, and a top portion extending between the first arm and the second arm, and capable of being deflected, prior to insertion of the lead, from a first position corresponding to a first relative position of the first arm and the second arm to a second position corresponding to a second relative position of the first arm and the second arm; and

- a housing mounted within the connector block, the housing having a first annular member and a second annular member, wherein the first connector clip is positioned, while in the second position, within the first annular member and the second connector clip is positioned, while in the second position, within the second annular member and oriented generally orthogonally to the first connector clip, and the first member is formed to be fixedly engaged with the second member to form an aperture in alignment with the connector port to receive the lead proximal end along the insertion axis, the first connector clip and the second connector clip being enclosed within the housing, wherein, for each of the first connector clip and the second connector clip, the first arm extends from the top portion to a first end and the second arm extends from the top portion to a second end, and wherein each of the first connector clip and the second connector clip includes a first side wall along the first end and a second side wall along the second end, the end of the first arm and the end of the second arm being offset and

partially overlapping so that the first side wall is adjacent to and engaged against the second side wall when the first connector clip and the second connector clip is in the first position, and the first arm and the second arm being partially spread apart so that the ends are non-overlapping and aligned so that the first end abuts the second end and the first side wall is not adjacent to and engaged against the second side wall when the first connector clip and the second connector clip is in the second position, each of the connector clips being oriented perpendicular the insertion axis of orientation of the proximal end of a lead such that the arms,, the non-overlapping ends of the arms, and the top portion together circumscribe an opening through which the proximal end of a lead passes during insertion.

34. (Canceled)

35. The device of claim 33, wherein the housing and the first connector clip and the second connector clip are formed of an electrically conductive metal.

36. The device of claim 35, wherein the electrically conductive metal is stainless steel.

37. The device of claim 33, wherein the first member and the second member form an aperture to receive the lead, the first arm and the second arm being engaged against the lead as the lead is advanced through the aperture to further deflect the first arm and the second arm from the second position to a third position corresponding to a third relative position of the first arm and the second arm.

38. The device of claim 37, wherein the first end is extended a distance outward from the second end when the first connector clip and the second connector clip is in the third position.

39. The device of claim 33, wherein the first member includes a first flange extending outward from a front surface of the first member to a first flange top portion, and the second member includes a second flange extending outward from a front surface of the second member to a second flange top portion, the first flange top portion being fixedly engaged against the second flange top portion to enclose the first connector clip and the second connector clip within the housing.

40. (Original) The device of claim 39, wherein the first flange and the front surface of the first member form a first recessed portion and the second flange and the front surface of the second member form a second recessed portion, the first connector clip being positioned within the first recessed portion and deflected to the second position, and the second connector clip being positioned within the second recessed portion and deflected to the second position.

41. The device of claim 39, wherein each of the first connector clip and the second connector clip include a bottom portion, the first arm extending from the top portion to the bottom portion and the second arm extending from the top portion to the bottom portion, and wherein the top portion of the first connector clip is engaged against the first flange and the top portion of the second connector clip is engaged against the second flange, and the bottom portion of the first connector clip is spaced from the first flange and the bottom portion of the second connector clip is spaced from the second flange.

42. The device of claim 40, wherein the front surface of the first member and the front surface of the second member form an aperture to receive the lead within the housing, the first arm and the second arm of each of the first connector clip and the second connector clip being engaged against the lead as the lead is advanced through the aperture to further deflect the first arm and the second arm from the second position to a third position corresponding to a third relative position of the first arm and the second arm.

43. The device of claim 42, wherein the first end is extended a distance outward from the second end when the first connector clip and the second connector clip is in the third position.

44. The device of claim 33, wherein the first member includes a first flange extending outward from a front surface of the first member and the second member includes a second flange extending outward from a front surface of the second member, the second flange capable of being fixedly engaged about the first flange to enclose the first connector clip and the second connector clip within the housing.

45. The device of claim 44, wherein the second member includes a third flange extending outward from the front surface of the second member, the first flange and the front surface of the first member forming a first recessed portion and the third flange and the front surface of the second member form a second recessed portion, the first connector clip being positioned within the first recessed portion and deflected to the second position, and the second connector clip being positioned within the second recessed portion and deflected to the second position.

46. The device of claim 45, wherein each of the first connector clip and the second connector clip include a bottom portion, the first arm extending from the top portion to the bottom portion and the second arm extending from the top portion to the bottom portion, and wherein the top portion of the first connector clip is engaged against the first flange and top portion of the second connector clip is engaged against the third flange, and the bottom portion of the first connector clip is spaced from the first flange and the bottom portion of the second connector clip is spaced from the third flange.

47. The device of claim 45, wherein the front surface of the first member and the front surface of the second member form an aperture to receive the lead within the housing, the first arm and the second arm of each of the first connector clip and the

second connector clip being engaged against the lead as the lead is advanced through the aperture to further deflect the first arm and the second arm from the second position to a third position corresponding to a third relative position of the first arm and the second arm.

48. The device of claim 47, wherein the first end is extended a distance outward from the second end when the first connector clip and the second connector clip is in the third position.

49. (Withdrawn) A connector assembly for detachably connecting a lead to an implantable medical device, comprising:

- a connector block having a connector port to receive a proximal end of a lead inserted therein along an insertion axis of orientation;

- a first deflectable connector clip having only two lead contact surfaces including a first arm, a second arm, and a top portion extending between the first arm and the second arm, the connector clip capable of being deflected, prior to insertion of the lead, from a first position corresponding to a first relative position of the first arm and the second arm to a second position corresponding to a second relative position of the first arm and the second arm; and

- a housing mounted within the connector block configured to maintain the first deflectable connector clip.

50. (Withdrawn) The assembly of claim 49, further comprising:

- a second deflectable connector clip similar to the first deflectable connector clip, contained within the housing, rotated with respect to the first connector clip, wherein the housing is configured to maintain the first and second deflectable connector clips in the second position.

51. (Withdrawn) The assembly of claim 50, comprising:

wherein the second deflectable connector clip includes two lead contact surfaces.

52. (Withdrawn) The assembly of claim 49, comprising:

wherein the housing includes a first annular member and a second annular member, the first member formed to be fixedly engaged with the second member to form an aperture in alignment with the connector port to receive the lead proximal end along the insertion axis, the connector clip being enclosed within the housing, wherein the connector clip is positioned within one of the first member and the second member while in the second position, wherein the first arm extends from the top portion to a first end and the second arm extends from the top portion to a second end, and wherein the connector clip includes a first side wall along the first end and a second side wall along the second end, the end of the first arm and the end of the second arm being offset and partially overlapping so that the first side wall is adjacent to and engaged against the second side wall when the connector clip is in the first position, and the first arm and the second arm being partially spread apart so that the ends are non-overlapping and aligned so that the first end abuts the second end and the first side wall is not adjacent to and engaged against the second side wall when the connector clip is in the second position, the connector clip being oriented perpendicular to the insertion axis of orientation of the proximal end of a lead such that the arms, the non-overlapping ends of the arms, and the top portion together circumscribe an opening through which the proximal end of a lead passes during insertion.

IX. Evidence Appendix

None.

X. Related Proceedings Appendix

None.